

**Notice of Allowability**

Application No.

09/631,126

Examiner

Heather D Gibbs

Applicant(s)

FUJIMOTO, MAKOTO

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/19/2004.
2. ☒ The allowed claim(s) is/are 4-6, 10-22, 29-30, 47, 49-64.
3. ☒ The drawings filed on 02 August 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

  
EDWARD COLES

PATENT EXAMINER

DETAILED ACTION

*Response to Amendment*

1. The amendment filed on 04/19/2004 has been entered and made of record. Claims have been renumbered 1-35.

*Allowable Subject Matter*

2. Claims 1-35 are allowed.
3. The following is an examiner's statement of reasons for allowance: Claims 1-35 are allowable over the prior art made of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches Claim 17 (currently amended): A light-scanning optical apparatus comprising: an optical deflector; an incidence optical system adapted to cause a light beam emitted from a light source to strike a deflection plane of said optical detector with a predetermined angle in a sub-scanning section; and a focusing optical system for focusing the light beam reflected by the deflection plane of the optical deflector on a surface to be scanned, wherein said focusing optical system includes an first optical system having a spherical lens and a first cylindrical lens showing power in the main-scanning direction and a second optical system showing power in the sub-scanning direction, wherein said focusing optical system satisfies the requirements of conditional formulas (1) and (2)  $|(N1 - 1)/R2 * F| < 0.15$  (1) and  $|(N2 - 1)/R3 * F| < 0.15$  ; (2) and wherein F is the focal length of the first

Art Unit: 2622

optical system in the main-scanning direction,  $1t_2$  is the radius of curvature of the surface of the spherical lens facing the surface to be scanned,  $11.3$  is the radius of curvature of the surface of the first cylindrical lens facing the optical deflector as viewed in the main-scanning direction,  $N_1$  is the refractive index of the material of the spherical lens at the operating wavelength, and  $N_2$  is the refractive index of the material of the first cylindrical lens at the operating wavelength, respectively, as set forth in Claims 1, 17,30,33 including all of the features recited therein.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

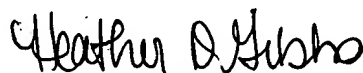
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D Gibbs whose telephone number is 703-306-4152. The examiner can normally be reached on M-F 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Heather D Gibbs  
Examiner  
Art Unit 2622

hdg



EDWARD COLES  
SUPERVISORY PATENT EXAMINER  
TECHNICAL CENTER 300